AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Page 1, before line 1, insert the following headings:

BACKGROUND OF THE INVENTION

1. Field of the Invention:

Page 1, line 10, insert the following heading:

2. Description of the Related Art:

Page 6, amend the paragraph beginning at line 6 as follows:

U.S. Pat. No. 3,743,488 describes a process in which the hydrocarbon steam mixture is repeatedly heated in a flue gas stream ~~steam~~ and reacted in adiabatic reactors external to the flue gas stream, with steam reforming catalyst pellets. This concept offers easier access for change of the catalyst in the external reactors. However, the use of many adiabatic reactor vessels is overall an expensive solution.

Page 6, line 28, insert the following heading:

SUMMARY OF THE INVENTION

Page 12, line 8, insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Page 12, line 11, insert the following heading:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Page 12, amend the paragraph beginning at line 15 as follows:

FIG. 1 depicts a conventional system where process gas of hydrocarbon feedstock [1] and steam [2] is introduced in a pre-reformer [20] at temperatures of about 450° C to 550°C. By the steam reforming reactions proceeding in the pre-reformer, the temperature in the process gas usually decreases or increases slightly when carrying out the pre-reforming process depending on the hydrocarbon feedstock, feedstock as it is an adiabatic operation. The pre-reformed product stream [4] and optionally carbon dioxide [9] ~~[8]~~ enter the heating coil. The optional addition of CO_2 is indicated by a dashed line.

Page 13, amend the paragraph beginning at line 10 as follows:

Hydrocarbon feed [1] is mixed with process steam [2] forming the feed stream [3] to the adiabatic pre-reformer [20]. This step is optional and can be left out if it is not required. Steam and/or CO_2 can then be added if desired to the pre-reformed product stream [4] or in the case where pre-reforming is not required, to the hydrocarbon and steam feed stream [3]. The mixture then enters a process heating coil [21] situated in the flue gas section [27] from a fired

tubular reformer [29] utilising the heat content of the flue gas [12] to carry out steam reforming of the process stream. In heating coil [21], the pre-reformed stream [4] is heated to, for example 600-700° C before being collected in a header system [22]. A structured element catalysed with steam reforming catalysts [22a] is situated inside header system [22]. Heated stream [4] passes through catalyst [22a] utilising the heat to steam reform the hydrocarbon content of the process stream and forming stream [5]. Stream ~~Steam~~ [5] is led to a second process heating coil [23].

Page 13, amend the paragraph beginning at line 30 as follows:

Stream [5] is heated to, for example, 600° C to 750° C in heating coil [23] before being collected in header system [24]. A structured element catalysed with steam reforming catalysts [24a] is situated inside header system [24] and heated stream [5] passes through catalyst [24a] utilising the heat to further steam reform the hydrocarbon content of the process stream forming stream [6]. Stream ~~Steam~~ [6] is lead to a third process heating coil [25].

Page 14, amend the paragraph beginning at line 23 as follows:

If no further reheating and reaction steps are required, stream ~~steam~~ [7] is led to the reforming tubes [28] situated in the fired tubular reformer [29]. Here additional heat is added to the process by firing fuel, and the desired reformed product [8] is collected from the reforming tubes.